

International perspectives on the theory - practice divide in secondary initial teacher education

HOLLAND, Mike, EVANS, Angela and HAWKSLEY, Fiona

Available from Sheffield Hallam University Research Archive (SHURA) at:

<http://shura.shu.ac.uk/3961/>

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

Published version

HOLLAND, Mike, EVANS, Angela and HAWKSLEY, Fiona (2011). International perspectives on the theory - practice divide in secondary initial teacher education. In: Association of Teacher Educators in Europe, Latvia, August 2011. (Unpublished)

Copyright and re-use policy

See <http://shura.shu.ac.uk/information.html>

International Perspectives on the Theory - Practice divide in Secondary Initial Teacher Education

Paper delivered at the Annual Meeting of the Association of Teacher Educators in Europe, University of Latvia, August, 2011.

Mike Holland, Angie Evans, Fiona Hawksley, - Sheffield Hallam University UK

“To practice without theory is to sail an uncharted sea; theory without practice is not to set sail at all. (Susser, 1968)

Introduction

This paper is centred on one of the main issues that underpins the move towards more school based initial teacher training in England - who is developing the theoretical aspects of a teacher's professional knowledge? Traditionally this has been one of the functions of the University. For the purposes of this paper we have focussed on the trainees' perspectives of what theoretical aspects of their training have been developed in schools, which teaching staff were involved and how well this was done. The three routes studied were all secondary and two were school-based where the trainees were employed by the school as unqualified teachers - Teach First (TF) and the Graduate Teaching Programme (GTP). The third route was the Postgraduate Certificate in Education (PGCE) during which two 10 week block teaching practices take place in schools allocated by the University. All data was collected between March and May 2011 and represents a snapshot of trainee views after about two thirds of the training year. The composition of cohorts was different in terms of age and experience before commencing the training and may explain some of the findings.

Teach First trainees are recruited nationally through a rigorous selection process, are allocated to schools in challenging circumstances (schools having below average student achievement at age 16). TF trainees all have very high academic qualifications, are very recent graduates and undertake a short residential induction course before starting work as an unqualified teacher, with responsibility for some full classes from the outset. There is a similar route of training in the USA known as Teach for America. Teach First trainees benefit by considerably more visits from university faculty than the two other routes as TF more generously funded by central government. GTP trainees are often 'career changers' and have a wider age range. Many are currently working in schools in a support capacity, and have been selected by their schools as suitable for teacher training, often with an intention that the school will employ them on completion of the course.

The methodology used was a survey to trainees following each of the three routes using a combination of closed and open questions. These questions were based upon those devised by the ATEE RDC secondary group at the 2010 Annual Meeting - with the intention that the theory - practice link theme would be a common focus for research during the 2010-11 academic year. A group (15) of Senior Mentor Coordinators (Teachers who have responsibility for coordinating initial teacher training in schools) also completed a limited number of questions from the same survey and later had an opportunity to see the analysis of the trainee responses and discuss these. Overall, the data is from a sample of about 50 trainees from each route with survey questions that asked about how theoretical aspects teaching and learning were being developed during school based training.

The move towards a greater focus on school based teacher training in England has partly been prompted by the introduction of a national standards framework, and the desire of successive governments in the past twenty years to reduce the involvement of the university providers in teacher education. Secondary longer routes (3 or 4 years) have been largely replaced by shorter 1 year routes with a graduate entry, partly because there has been a national policy to increase the number of highly qualified graduates (there is a particular shortage of mathematics and physical science graduates) entering teaching. Governments in England have attempted to make training more flexible and accessible in recent years. There has been an ongoing debate about the necessity for teachers to have a theoretical basis to their work and to be informed by research in teaching and learning. For example, in the current national standards the guidance for standards 7, 8 and 9 states:

Teachers analyse and reflect on their own practice in order to improve learning and teaching. They seek to improve practice by engaging with and contributing to the development of new knowledge and ideas. Teachers use their experience and professional judgement to access the benefits of adapting their practice through the critical analysis of innovative pedagogy, strategy and theory.

As teacher educators we ascribe to the view that there is a body of professional knowledge that is necessary for anyone worthy of the title of qualified teacher with some of this being theoretical. This study explores whether or not our current trainees share this view.

The literature underpinning our study can be broadly be divided into

1. Studies that justify the place of theory within teacher education - as a component of professional knowledge
2. Theory-practice research into teacher training courses, particularly the place of theory in school- based training.

Justification of a theoretical knowledge base for teachers.

Teacher and school effectiveness research has identified the teacher as being the most important factor on raising achievement and in England political parties strongly align their education policies to student achievement. Strategies to raise pupil achievement in England have included the introduction of a national curriculum for the 5-16 age range, national testing and a national standards framework for qualified teachers. These strategies ultimately have led to a loss of professional autonomy for teacher educators (both in universities and schools) - who have been largely sidelined by politicians. Government strategies have resulted in much debate on how teachers can raise pupil achievement and what professional development is needed in addition to training.

National strategies, for example, in improving literacy and numeracy have been introduced but with little measurable effect. The difficulty with basing policy on student achievement is an assumption that there is a scientific basis to this and that what is intended to be measured can actually be measured. Validity issues are very important to those who understand them (those with professional knowledge of teaching and learning) but they tend not to be recognised by politicians or the general public. There is much current debate about the accuracy and purpose of the examination system, grade inflation and pupils being encouraged to take easier subjects to improve school examination statistics. Despite these

concerns league tables based on pupil achievement, and target setting have remained the driving force for educational policy. Schools are increasingly under pressure to improve results at all levels which has led to teaching to the test and has had a marked effect on the curriculum, particularly in primary schools. Baseline testing (at entry to the school) and a raft of predictive testing that is used to monitor progress to government set targets has led to an individualised target setting culture, as well as targets for teachers, subjects, schools and Local Authorities.

Since the election of a coalition government a new set of policies have been put in place about the curriculum which have a focus on a limited range of traditional academic subjects and a change to the structure of league tables at 16 - where social factors have been removed. There is a continuation of the policy to reduce the role of local education authorities, increase privatisation and for a wider group of organisations to be able to run schools, including parents. Many teachers feel that these policy changes are based on a simplistic and narrow view of the role of the school and teaching, resulting from politicians' memories of their experience in what was almost certainly an elitist school experience. This is often a world away from the challenges experienced every day by teachers faced with reluctant learners who do not see the value of schooling. For many, pupil progress in the educational system has been limited by poor social living conditions and a rejection of society values. Teachers who spend their lives working with such children know that educational achievement can provide a route to later success in life but they are often working against an anti-education culture that permeates the families and peer culture in which pupils live. Durkheim (1897) argued that education is only the image and reflection of society rather than a force to resolve society ills. Times have changed. Increasingly rapid changes to society in the past century (cited by Singer and Pezone, 2003) have been identified as the cause of social unrest by writers such as Dewey, Freire, Green, Horton and Banks with social unrest remaining as challenge for many countries. The most important change is probably the much wider availability of knowledge on the internet and social networking. Faster communication is leading to potential new directions for society, particularly for the young. The recent riots by young people in English cities during August 2011 provides evidence that all is not well in our society with popular blame about the decline in moral values being partially attributed to the failings of the schooling system and teachers which only serves to undermine the status of teachers. However, the situation is vastly more complicated, with the unemployment of young people, poor economic conditions and tensions between communities all being factors - with a sound interpretation of the situation requiring an understanding of social theory. Beginning teachers need to know how their contribution helps to transform society.

The Guidance for the Standards for Qualified Teachers that has been in use for the past 10 years is seen by the coalition government as over complex and unbalanced. The new standards - for September 2012 are simpler- but there is less recognition given to the wider role of the teacher. This could be interpreted as an attempt to downgrade the traditional wide encompassing role of the teacher in England and possibly a reduction in professionalism. Successful teachers recognise they have acquired their level of competence through a high level of reflective practice usually over several years though many do not recognise the place of theory in this or use the findings of educational research. Experienced teachers clearly have a much wider knowledge base that can be used to analyse and interpret teaching and learning - and this is begun during initial training. However they are sometimes

working in a culture where scholarship is not valued and they do not have opportunity to engage in professional dialogue at a high level.

There is some evidence to suggest that high academic performance is related to a higher standard of teaching. For example a study in Scotland (Holligan, 1997) used a semi structured interviews to claim that there was a positive link between the quality of course work (including theoretical underpinnings) and teaching performance in the classroom. It was used to refute the New Right rhetoric that theoretical studies in education are dispensable. The current policy in England to raise the entry standards for teaching courses is recognising that intellectual ability is important. A higher quality of intake into teaching is likely to demand a more thorough definition of professionalism and will want to raise the professional status of teachers.

In England, the Training and Development Agency - a government department established a career path of standards to enable teachers to monitor their progress. Theory appears to be less valued by teachers than professional knowledge. Writers such as Shulman have been very influential in conceptualising the professional knowledge of teachers, but few teachers in England have this understanding unless they have studied at masters degree level in education, even for those who have followed a PGCE rather than school based training. There is a commonly held view that teaching is a craft and skills based activity, in which common sense plays a significant part in decisions about delivery of teaching. If so, what scope is there for theorising the practice of teaching in England?

Investment in research into the professional knowledge base of teachers tends to be in larger economies such as the USA, where there are many large scale studies that have a robust scientific methodology. The outcomes are taken seriously by policy makers. In the UK it is largely those teachers who undertake Masters level study who are likely to be introduced to use theory. They are typically expected to interpret findings in the context of established theories; with the benefits mainly to the individual researcher such studies are inevitably small scale. The PGCE course is best placed to introduce theory to develop pedagogical understanding, though this varies from subject to subject with science, mathematics and language teaching having the strongest theoretical research traditions. It is therefore not surprising that the professional knowledge base for teachers is contentious and that research has little impact on what teachers do. Moves towards making teaching a Masters level profession are helping to address this but has been stalled by funding cuts in education, and policy changes of the new government.

Research into Teacher Training courses

As early as 1983 Sellars and Stevens identified three ongoing issues in teacher education - the lack of communication between educational research and teacher decision making, the belief that teaching has a shallow knowledge base, and the belief that teaching does not require a theoretical knowledge base at all. Waghorn and Stevens (1996) found that trainees were well aware of the dichotomy between theory and practice, and that student teachers often undertake teaching practice in prevailing conditions that they are powerless to change .The same conclusion was reached by Renwick and Vize (1993) in a longitudinal study. At this time (before the development of school based routes) time spent in schools was practice teaching which usually meant compliance with the wishes of teachers who passed over their class for a defined number of weeks. Teachers that are following two of

the school based routes outlined in this paper have a different challenge as they have to teach their own classes from the beginning. This means that they usually have more autonomy in the planning and delivery of lessons than PGCE trainees, though they will have the same constraints in terms of syllabus and schemes of work.

The move towards a greater focus on school based training prompted more attention being given to trainee voice (Furlong, 1990). The findings of Furlong's study suggested that school based trainees did not reject theory but it was only at the University where theoretical discussion took place. Trainees in Furlong's study felt that there was insufficient focus on relating theory to their practical experience. Early studies in the literature on the theory-practice divide were mainly based on 3 or 4 year teacher training routes, rather than the now more common secondary one year route following graduate studies. In 1997 Mc Nally et.al, found little talk in schools about critical reflection or relating theoretical topics met at the university with practical teaching. Attempts have been made to relate performance as a teacher with understanding of theory (Holligan et al, 1997). This study found that ideas were generated at the university, but discourses in schools were mainly restricted to practicalities and that trainees valued practical experience above the study of educational theory. However this did not mean that acquiring theoretical perspectives was unimportant and many trainees felt that it was significant to their learning (Furlong, 2000).

An important paper by Korthagen and Kessels (1999), motivated by the pressure towards more school based teacher education, brought together current understanding of the linking of theory and practice in teacher education. They used the concepts of episteme and phronesis to introduce a new way of framing professional knowledge and a holistic way of describing the relationship between teacher cognition and teacher behaviour leading to a model of three levels in learning about teaching - Gestalt level, schema level and theory level.

A study by Williams and Soares (2000) confirmed the trainees and their mentors valued knowledge of educational theory. A view was beginning to develop that schools and universities both had a different and distinctive role to play in introducing trainees to theoretical ideas. Hobson (2003), for example distinguishes two categories of trainees - the procedure apprentice and understanding orientated apprentice, with the latter more inclined to engage in theoretical interpretations. Within the GTP route Smith and McLays (2007) found that the role of the university was valued by trainees, as it provided an opportunity for the sharing of ideas with colleagues and tutors but was very much dependent on the individual trainee and the school in which they were teaching. Smith and Hodson (2010) used a case study approach to examine the perceptions of GTP trainees about what counts as theory and related this to wider professional knowledge. They found that trainees were able to identify ways in which theory had positively influenced practice. Theories of work based learning (Eraut, 2004) have also been used to study the interplay of how formal and non formal learning takes place on the GTP route with the mentor having an important role in raising the level of trainees' learning and understanding, for example, when observing and interpreting the lessons of colleagues. There are many different conceptions of theory researchers. In Denmark (Laursen et.al.2007) used in-depth interviews to explore trainees' views. They found that trainees view theories as a product of another person's work and theorising is not viewed as anything they do themselves as trainee teachers. Such findings may, of course, be contextual to the type of training being followed, in this case a four year route, involving 24 weeks teaching practice in schools.

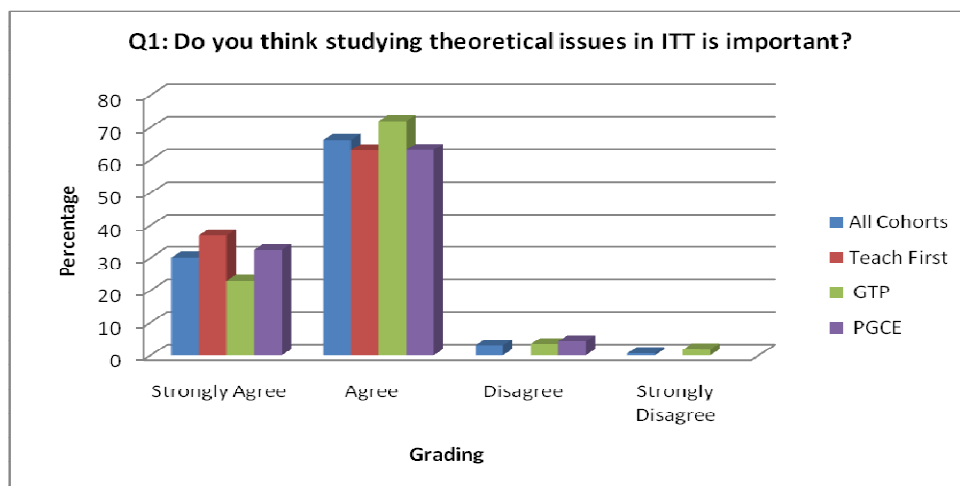
In secondary initial training some trainees are able to access a wide body of literature about subject pedagogy particularly in the teaching of mathematics, science and English and in relation to conceptual difficulties of teaching and learning the subject e.g. in science (Wilson, 2005). However, there is a growing body of pedagogical knowledge in all secondary subjects, including for example psychological factors in the teaching of dance, music and physical education. Trainees need encouragement to engage in this both informally and more formally during their training. Our data suggests that in our own GTP this is inconsistent. We suspect that trainees who have schools based tutors and other school staff who value and engage trainees in a theory-practice discourse are likely to receive long term benefits to their development as teachers, as well as more immediate benefits in improving classroom practice.

More recently there have been some studies where trainee teachers are actively involved in projects designed to address the theory-practice divide (Huang-Yao Hong et.al.,2009), using the social process of knowledge building practice (Hargreaves 1999, Hong and Sullivan 2009). This approach has been used with trainees in Taiwan as a course requirement before the start of their teaching practicum. The course makes use of a technology platform to support a collaborative learning environment. This might be the way forward to address the theory practice divide in school based courses in England.

Results from the Survey of Trainee Teachers

Do you think that studying theoretical issues in ITT is important? Give reasons for your grading.

Quantitative data shows that the majority of trainees think that studying theoretical issues is important. All from the Teach First route agreed or strongly agreed. Very few (and these were only from the GTP and PGCE routes) disagreed that studying theoretical issues was important.



When looking into the reasons given for why trainees think studying theoretical issues in ITT is important, there was a wide range of understanding of the value and application of theory to practice amongst the students and this also varied within each cohort. Many trainee teachers struggle to see the relationship between 'theory' and 'practice' (Laursen, 2007).

There was a greater recognition of the value of theory for beginner teachers amongst Teach First and least recognition or understanding amongst PGCE students. The majority of Teach First trainees saw value in theory as underpinning reflection, facilitating their decision making, enabling them to form their own individual views about teaching methods, developing a wider repertoire of teaching approaches and providing a solid foundation for planning:

"Engaging with theory has enabled me to look at my practice critically and modify/reflect areas of practice that need to be changed or improved" (TF Student 8)

"Engaging with theory extends knowledge of how to teach and this personal dialogue exposes you to other ways of teaching" (TF Student 6)

A small minority of trainees from Teach First saw drawbacks in a theoretical approach where it was viewed as "detracting from the main purpose of teaching" (TF Student 2)

"Theory is important to a degree but teaching is the most important aspect to me. I take advice from more experienced teachers who I believe are a good influence on my teaching- I would then find out why it works by looking for theory to back it up, I think teaching is something you learn through experiencing it not being overwhelmed by theory- which is why I did Teach First!" (TF Student 1)

For GTP trainees there was a more mixed response to the question of whether theories were important but generally most students seemed to think it was, that it complemented their practice and helped them to understand why particular approaches work. However they constructed more of a divide between theory and practice. In many cases theory is only seen as useful for 'getting the basics'

"I don't think theories are the be all and end all to being a teacher. Having strong knowledge of theories help but they don't make you a good teacher. I believe that theory will only underpin/complement your practice "(GTP Student 1)

"Theoretical issues are rarely mentioned if at all. Training takes place in the classroom. Reading can help but can only act as a guideline." (GTP Student 5)

Where theory is taught, it is in a way that is 'distant' from practice, or 'too vague', it can be 'frustrating' and seemingly 'irrelevant'. In the Danish study (2007) interviewees stated that 'the lecturers teach theories but do not care how these should be used in practice'. This could be an issue that may also be applied to our cohorts.

For PGCE trainees, a minority complained about being exposed to theory. However, in general there was a recognition that theory is important although very few students gave examples of theoretical ideas or how they related to practice. The divide between theory and practice is more strongly delineated with very few responses about the value of using theory to underpin reflection (unlike Teach First students). There appeared to be an increased number of students who had only a vague and undefined sense of what theory had to offer 'well you wouldn't want to go into it (teaching) blind' and 'background issues are important'. For the majority of trainees there is a lack of understanding of the complementary nature of theory and practice and missed opportunities for using theory to explain or illuminate problems in practice.

'Rather than overarching theories I have discussed individual solutions to individual problems'

Many students who did value theory were unable or did not name any theories at all in subsequent questions. GTP Student 20 's was the most unusual response and at the other end of the spectrum of responses:

"I studied Education Studies at BA level at SHU and the theory behind educational policy, discourse and teaching has been invaluable and has given me a deep rooted knowledge of WHY I teach"

No trainees referred to the importance or value of using theory as a launch point for learning how to theorise themselves

What kinds of theories have you discussed?

The responses can be categorised into three types:

1. Theories/ theorists
2. National/local authority/ school teaching strategies/initiatives/policies,
3. Popular authors' books and websites

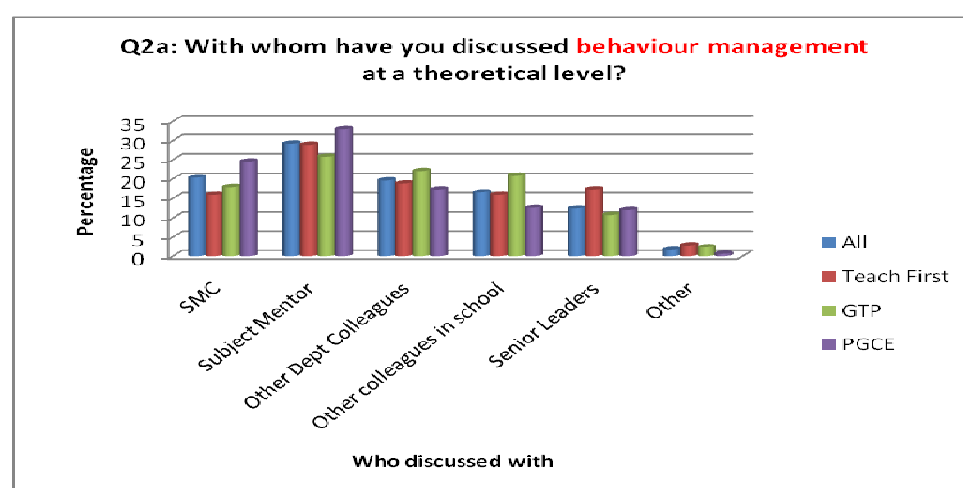
A significant number of students did not complete this section of the survey, which perhaps indicated that there was a lack of understanding of what was meant by 'theory' or that they were unable to express what the theories were. Many students who had said they valued theory left this question blank.

The focus of responses was on 'developing a range of practical strategies' that can be used in the classroom. One response stated that:

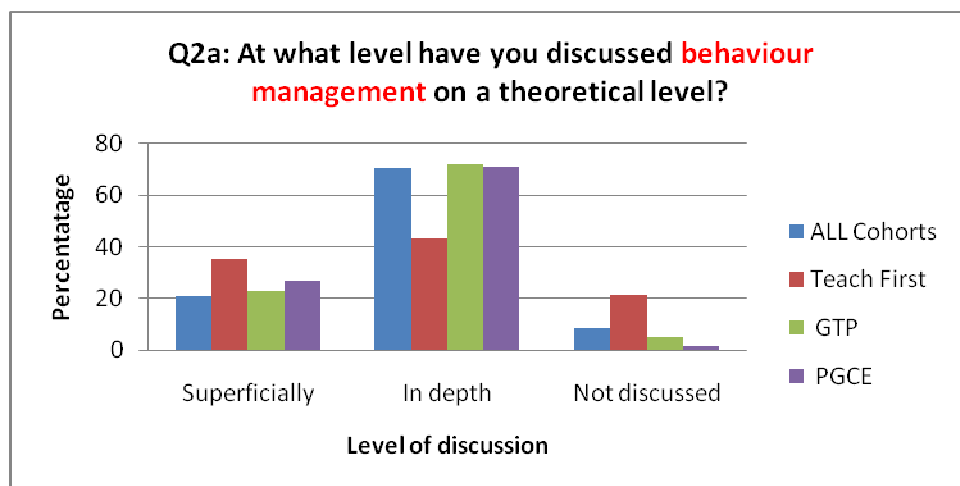
'reading other's theories is insightful but not imperative as you must find your own way'

(GTP Student 18)

Behaviour Management



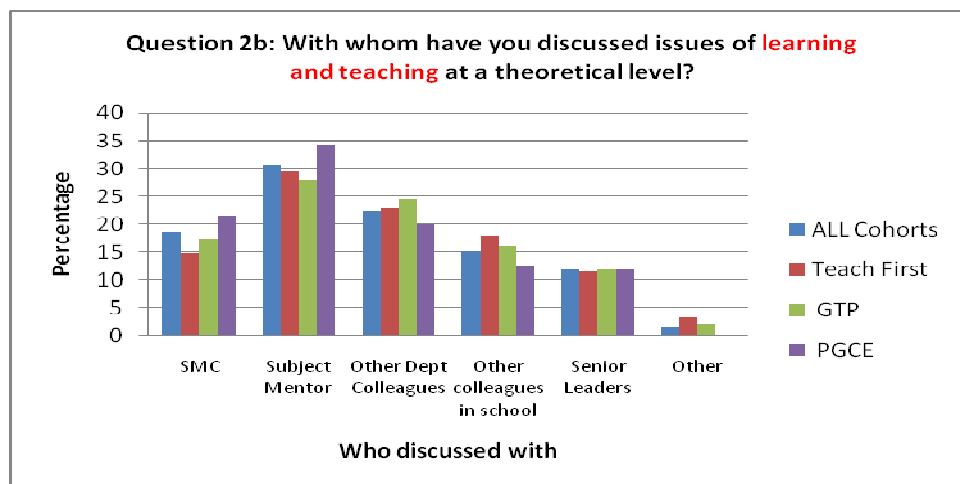
The majority of trainees in all cohorts discuss behaviour management with their subject mentor. This is the person nearest the classroom/ subject context in which they are working. However we can see a wide range of staff involved - understandably since this will be viewed as an ongoing whole school concern in every school). This suggests a 'community of practice' at work (Hagger and MacIntyre, 2006)



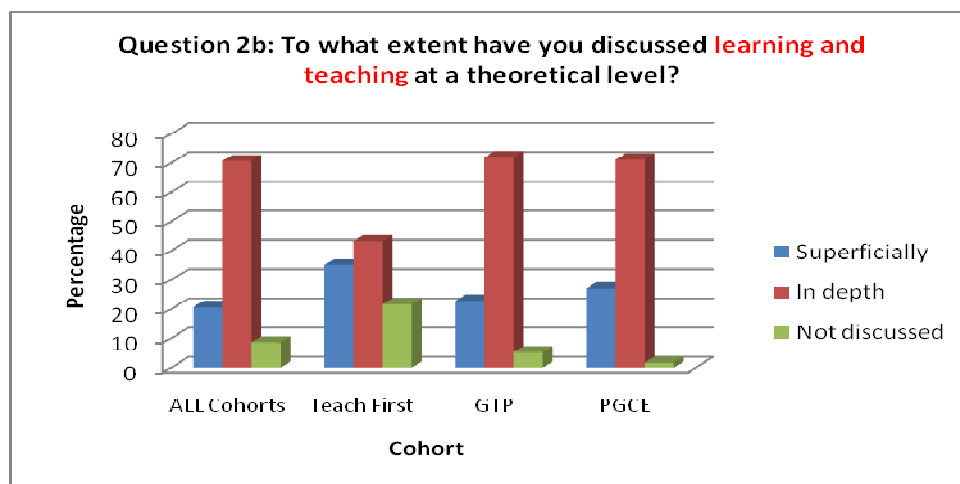
All cohorts appear to be discussing behaviour management in depth.

However, when we looked at the 'theories' that were discussed in relation to behaviour management the responses were characterized by a very limited number of theories (Pavlov, Maslow). Instead, mentioned were a multiplicity of teaching approaches and strategies together with local authority and school policies and popularised authors such as Sue Cowley and Bill Rogers. The number of responses to 'not discussed' could be where trainees realize they have not actually discussed behaviour management theories.

Learning and Teaching

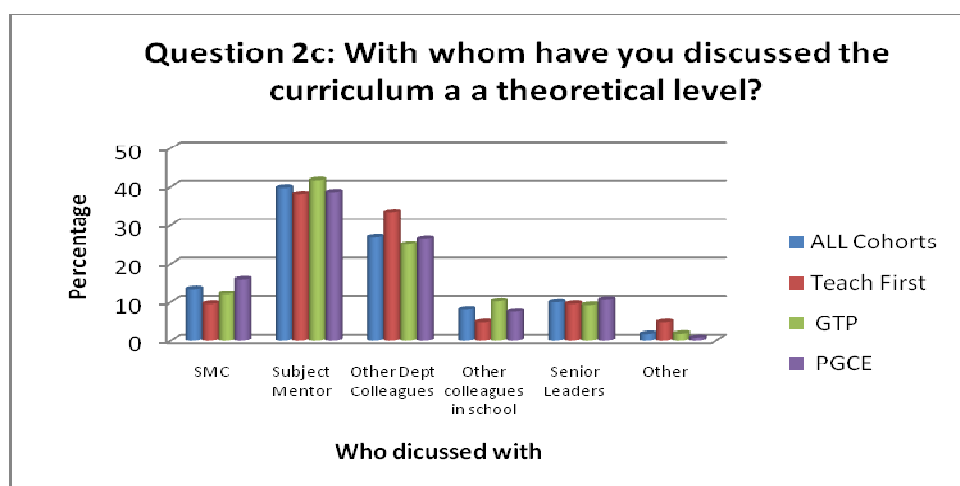


Similar to behaviour management, trainees discussed learning and teaching theories mainly with their subject mentor or other department colleagues.

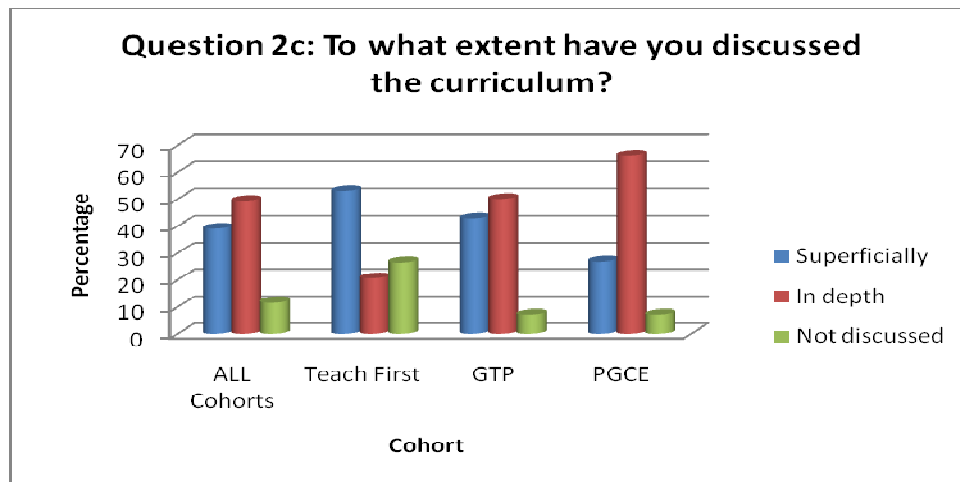


It would appear that all cohorts discuss learning and teaching theories in depth. However, the Teach First cohort has a fairly close split between those who felt they had discussed these theories in depth and those who felt they had discussed them superficially. Theorists that were mentioned were Vygotsky, Bloom, De Bono and Carl Rogers. Approaches to and creating and structuring learning e.g. cognitive learning, personalisation, pupil learning styles, assessment for learning; student centred learning and ICT use were mentioned, but not necessarily linked to the theoretical basis from which they stem. One popular author mentioned was Robert Powell who has publications and provides consultancy on 'Outstanding Teaching and Learning'.

The Curriculum



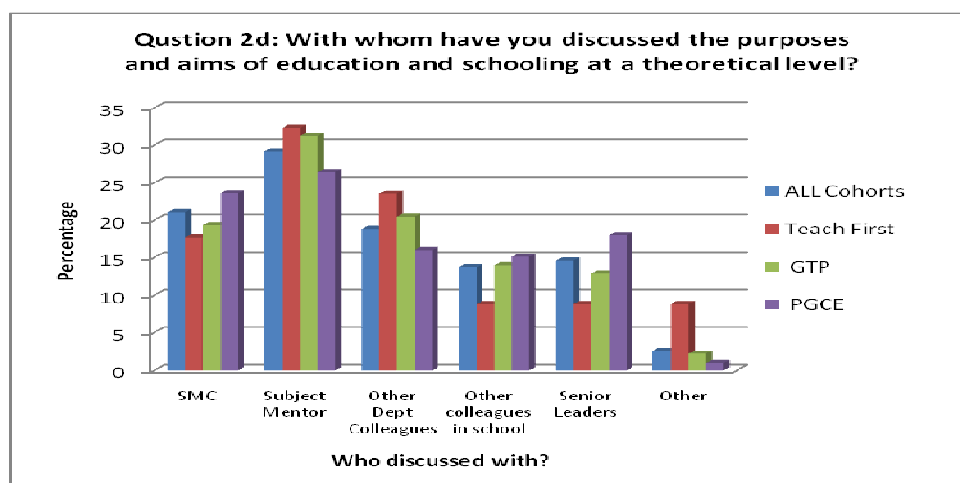
As expected, the subject mentor is the person where the curriculum is discussed at a theoretical level. It may be that trainees may be discussing their subject here rather than the broader curriculum which might be discussed with senior staff or the senior mentor co-ordinator.



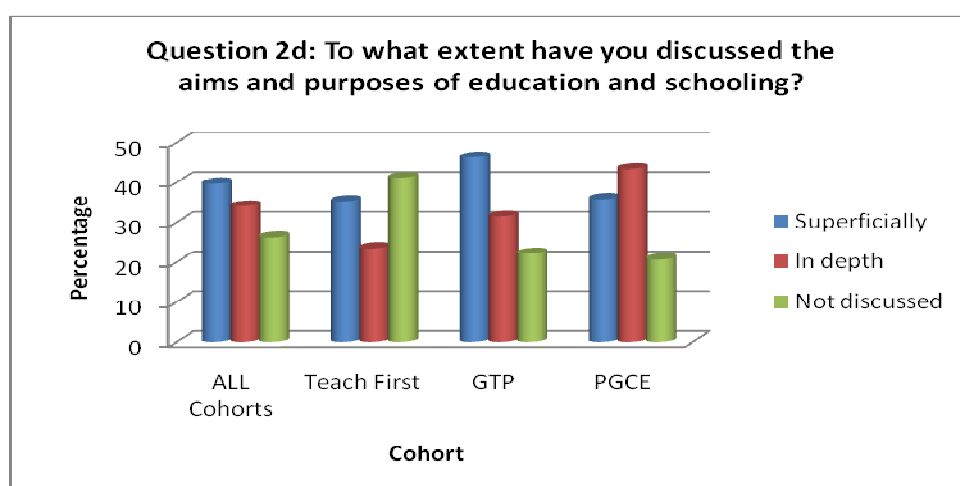
Whilst overall the curriculum is discussed in depth, there are differences between the cohorts. Teach First trainees feel they have discussed the curriculum superficially, whereas PGCE trainees feel they have discussed it in depth. This may be due to the different nature of each route and the emphasis placed on theorising about the curriculum by each route. GTP trainees are somewhat more split in their response. This may be because they are much more school based than the other two routes and have a background of working in schools.

Many trainees did not answer the section asking them to describe theories about the curriculum leaving it blank. Where it was answered National curriculum strategies and policies and guidelines e.g. those from QCA were quoted rather than theories. Lee Schulman was mentioned on a number of occasions but not the theory. Books written by ITT lecturers specifically about their subject curriculum were also mentioned. This suggests a limited knowledge of theories that relate to curriculum.

Aims and Purposes of Education



Again, most trainees discuss the purposes and aims of education and schooling with their subject mentor, although over one fifth of PGCE trainees also discuss this with the SMC; more Teach First trainees discuss this with other department colleagues as well and also other colleagues outside the school which might include their university tutor for example.



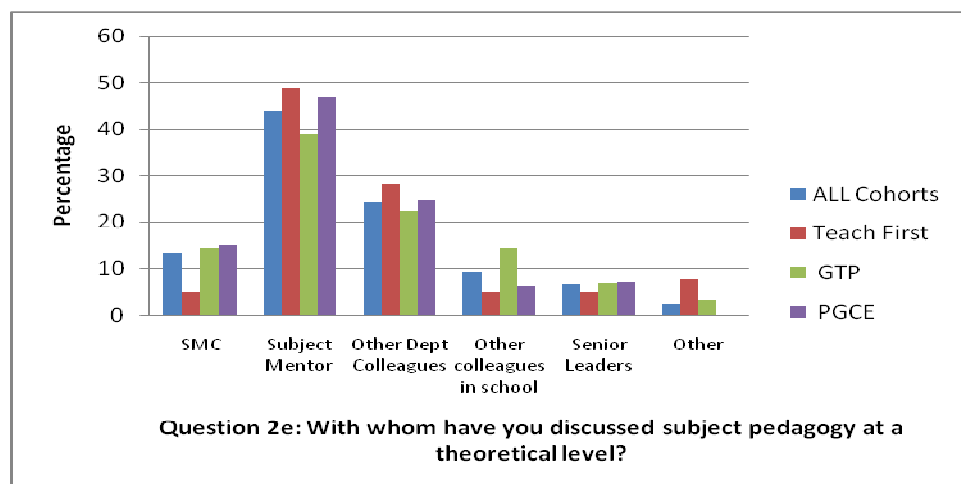
There was a considerably varied response to the extent to which aims and purposes of education and schooling are discussed in schools showing a lack of consistency in coverage. These aspects are not included within the teaching standards which are competence based: this may explain the lack of detailed coverage and inconsistency. Nearly three quarters of Teach First trainees had either not discussed or only superficially discussed the aims and purposes of education and schooling.

When asked about which theories were discussed few answers were given. Names mentioned were

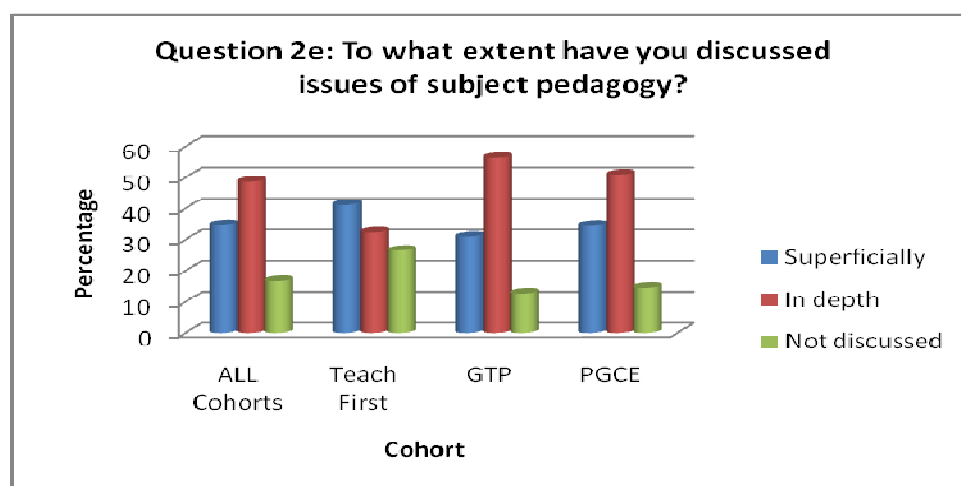
James Atherton (website); Geoff Petty, Capel, and Shulman

The product and process models of education had been discussed by some trainees; others had discussed society's needs and the imperative of preparing students for economic well being. There was no overall pattern in the responses given

Subject pedagogy



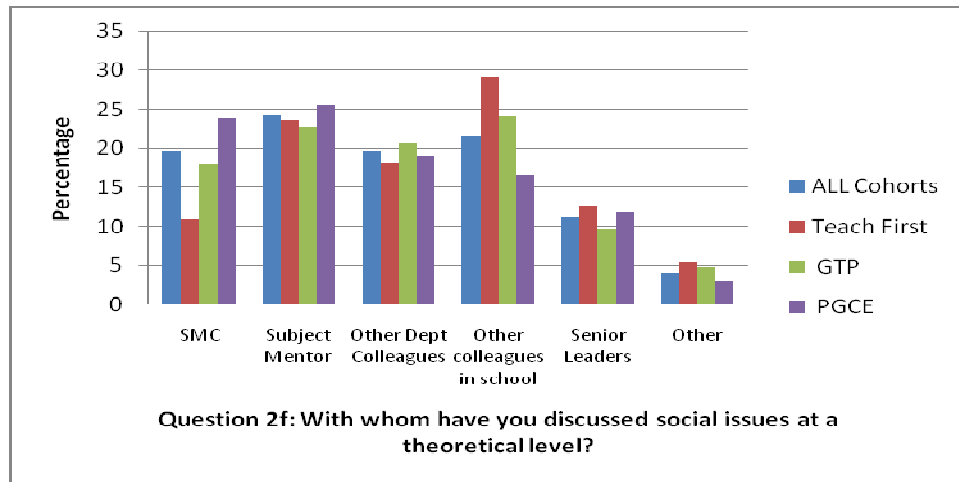
Overwhelmingly, as would be expected, trainees had discussed subject pedagogy with their subject mentor. There were few answers to the question about what theories had been discussed and none actually referred to any theories. In the Danish study interviewees felt that subject pedagogy was learned by practicing in schools.



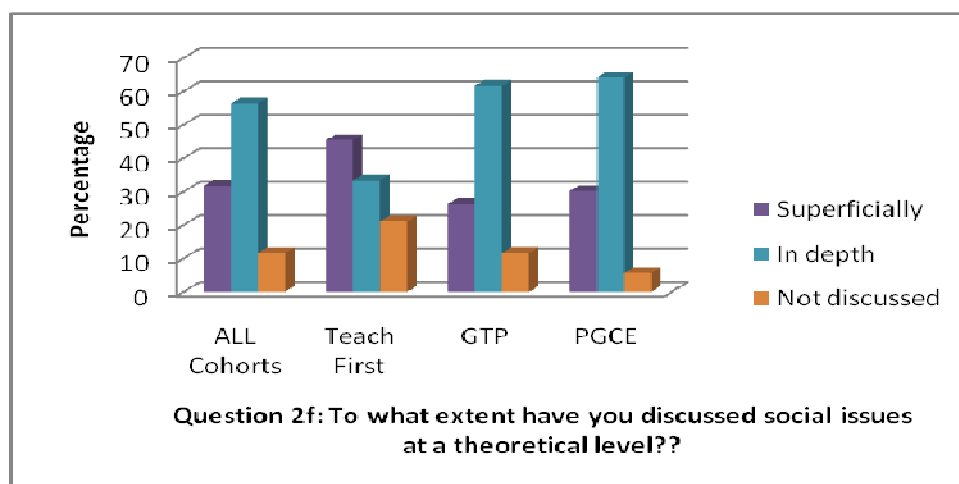
Although overall, all cohorts have discussed subject pedagogy in depth, nevertheless two thirds of the way through the course nearly half of all trainees had either not discussed subject pedagogy or only superficially. But this does vary when you look at each cohort separately. The GTP cohorts have over 50%, the majority of their cohort, who have discussed these issues at a theoretical level, whereas the majority of Teach First trainees have discussed this at a more superficial level.

Social issues

Many students did not respond to this question asking them for the theories they had discussed in relation to social issues or gave responses that revealed they did not understand the purpose of the question. Where they did respond, they mentioned national policies and initiatives e.g. Every Child Matters, Special Education Needs, English as an Additional Language, Gifted and Talented and the theorist Maslow.

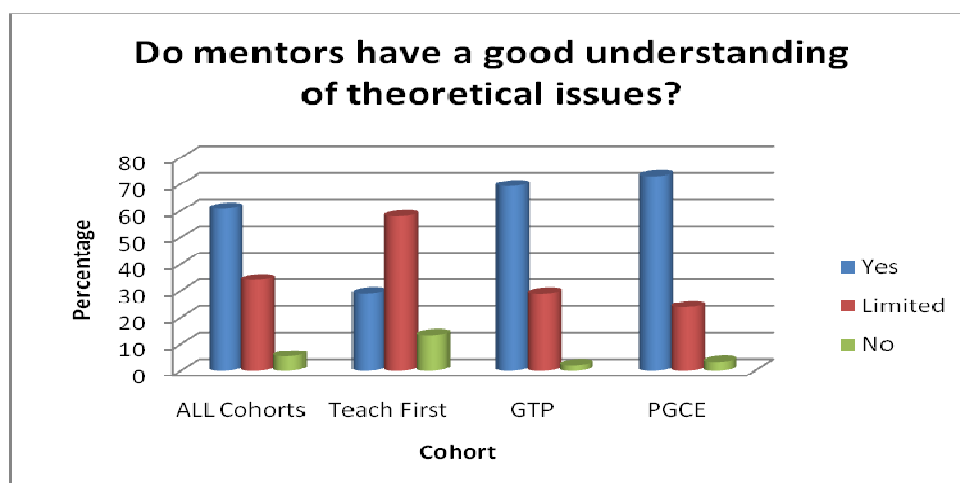


Although on the whole trainees tend to discuss social issues with their subject mentor, there are a high number of PGCE trainees who discuss this with the SMC, and a high number of Teach First trainees who discuss these issues with other colleagues in school. The role of the Senior Mentor Coordinator is more significant for the PGCE trainees.



Social issues tend to be discussed in depth, although 40% of Teach First trainees felt they had only superficially discussed the issues at a theoretical level.

What understanding do mentors have of theoretical issues?



On the whole, it would appear that trainees feel that mentors have a good understanding of theoretical issues. However Teach First trainees felt that the mentors' understanding of theoretical issues was more limited. All of the (highly qualified) Teach First trainees through that theory was very important and were more likely in the surveys to demonstrate their understanding of the role of theory; it is more likely that they are able to recognise the limitations of the mentors in their placements in this regard.

Give an example of where your knowledge of theoretical issues in education has had an impact on your classroom practice.

The following represents the most popular responses from all cohorts:

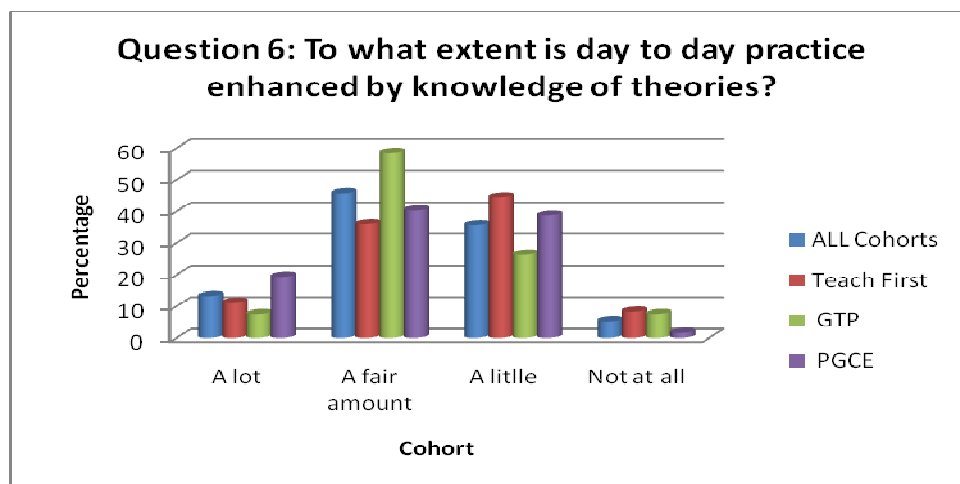
Planning; motivating pupils; assessment for learning; positive behaviour management; differentiation; progression; learning styles; questioning techniques; gifted and talented.

However, there were very few examples of linking a particular theory with impact on classroom practice e.g. Maslow and creating a safe classroom within the hierarchy of needs which suggests a superficial grasp on the linkages between theory and practice.

The responses to this question suggests a developing awareness of the impact and importance of particular kinds of professional knowledge on practice but revealed no insights into their understanding of the theoretical components of this professional knowledge.

This student gives a rare example of theorising from practice into the formation of a particular kind of teacher identity,

'(I) used behaviour management strategies to decide - A) what kind of teacher I wanted to be and B) planning and differentiating my lessons' (GTP Student 39)



Trainee teachers feel a theory is good if it can be used in practice. Larsen (2007) found similar responses: summing up, 'a theory is good if it can be used in practice'. So on a day to day basis, one would expect that if trainees understand theory, then their practice would be enhanced a lot by this knowledge. In our cohorts we can say that there is a 50:50 split in whether day to day practice is influenced by theories to any great extent.

Examples of being influenced by theory

The range given by students was considerable and reflects the diversity of learning needed by teachers in order to teach and develop their professional knowledge. Some examples include:

'Layout of worksheets, length of tasks, differentiation, knowing how to assess; timing, lesson planning and structures; social issues, expectations of student, Bloom's taxonomy, Vygotsky (scaffolding) teaching and learning styles; inclusion ; personalisation; behaviour management; questioning; motivating students'

'my creation of starters and plenaries is based on theory' (GTP Student 4)

There was no explication of how the theory influenced the practice or what was being learned.

Key Findings

- Ambiguity in the meaning of *theory* and how this was interpreted by the trainees. Trainees interpreted theory mainly as 'professional knowledge'
- Trainees conceptualise teaching as a problem solving enterprise- addressing multiple problems in practice. The development of theory tends to lag behind the rapidly changing learning environment and has been replaced by government and popularised initiatives. Trainees perceive the role of theory as limited. With only limited experience trainees see themselves as developing practical working knowledge- finding solutions to practice problems and look for answers across a wider body of knowledge than theories. Trainees do not realise the value, desirability or need to develop one's own theories which are grounded in practice.
- Our findings agree with the 2007 Danish study (Laursen - 2007) which used a methodology of in depth interviews and with trainees from the final year of a 4 year ITT course. Our data suggests there were similar responses to questions about the value of studying theory. However, our trainees in England were more positive about the value of theory as they conceptualised it. This might be attributed to having an all graduate intake to our 1 year routes.
- Our data reveals some differences in the responses of trainees following university based courses and school based courses. This is most likely to be a result of the differences between the three ITT programmes; different levels of support from teachers in schools and the academic entry qualifications required by each route. In one of the routes (Teach First) trainees are required to write masters level assignments as part of the programme and there is an increased focus on the connections between theory and practice. The focus of PGCE assignments tend to focus mainly on pedagogical concerns of teaching and learning; whilst achievement at M level is optional the majority of trainees now aim to achieve this level. There is also a general professional studies assignment which evidences some reading and knowledge of some theories. GTP trainees are encouraged to undertake reading but they are not required to do as much formally assess scholarly work. Central Training days for GTPs include theoretical aspects of teaching and learning which trainees are expected to discuss in schools with their mentors. The extent to which they do this is variable. Whilst the subject mentor is not the only person trainees discuss theoretical issues with they are however the key figure. It is essential then that the mentor has an in depth knowledge of theoretical issues and preferably experience of masters level work.
- The increase in school based training has led to changes in organisational structures in schools. It is now common in lead schools to have different teachers having a specific responsibility for an ITT route PGCE, GTP or Teach First trainees. This is because of the desire to spread ITT expertise amongst more school staff, but also because of the demands of mastering an ever growing set of administrative procedures. The selection of a good practitioner for the role of mentor is common. However the mentor's knowledge of theory and ability to explicate its relevance and

potential for impact on a trainees' practice is now more becoming increasingly important and should become a feature of the selection process.

- The QTS Standards have been in use in England for over a decade and are now widely understood by teachers working with trainees. The standards have helped to provide a common understanding of the role of the teacher and has in our view helped to prepare schools for a greater role in initial teacher training. However our data suggests that discussion about the standards does not always address theoretical ideas about professional knowledge other than a few key currently popular theorists. The current standards are to be replaced by a simplified set of standards in September 2012.
- Resources for the professional development of teachers have been largely directed at the implementation of national strategies e.g. in literacy and numeracy and ICT. They have been introduced with little reference to theoretical issues and research. The research behind some of the strategies e.g. the teaching of phonics is contested.
- The theory practice divide in teacher education has been an area of contention for at least 30 or 40 years. The concept of professional knowledge is less contentious because teachers now have a wider exposure to professional knowledge base through the media, initiatives such as the teacher training resource base (ttrb), and teachers TV. This has faltered in the last year due to budget cuts in public spending and new policy changes from the coalition government.

Recommendations

- To implement the government strategy to make ITT more school based there is clearly a need to develop further the school based teacher's understanding of the relationship between theory and professional knowledge and its application in the classroom in order to inform critical reflection and improvement to practice. Imaginative use of new technology may be one way forward.
- Schools should devote more resources to ensure that sufficient resources are available to develop their staff. This presents a difficulty in the time of budget cuts in the Education budget
- The nature and role of theory is under recognised by school based colleagues in the way it can inform a teacher's practice and critical reflection. This should be addressed in mentor professional development activities
- The teaching of theories should be clearly related to practical considerations
- Trainees should be encouraged to learn about established theories and develop their own theories that are 'grounded' in practice

References

- Durkheim E., (1897/1951) *Suicide, a study in sociology*. New York Free Press
- Eraut M. (2004) Informal learning in the workplace. *Studies in Continuing Education* 26, no 2 pp24273
- Furlong J., (1990) School Based Training: The students' views in *Partnership in Initial Teacher Training* eds. Booth M, Furlong J, Wilkins M, 89- 98 Cassel, London
- Furlong J. et al., (2000) *Teacher education in transition: Reforming professionalism* OU press
- Hargreaves, D. H., (1999) The knowledge-creating school. *British Journal of Educational Studies* 47(2) 122-144
- Holligan C., (1997) Theory in Initial Teacher Education: students' perspectives on its utility - a case study. *British Educational Research Journal* Vol 23, no 4, pp 533-551
- Hong H. and Sullivan F., (2009) Towards an idea-centred, principle-based design approach to supporting learning as knowledge creation. *Educational Technology Research and Development* 57(5) 613 -627
- Korthagen F, and Kessels J., Linking Theory and Practice: Changing Pedagogy of Teacher Education, *Educational Researcher*, 29(4), 4-17
- Laursen F., (2007) *Student Teachers' Conceptions of Theory and Practice in Teacher Education*. Paper presented at ISATT conference, Brock University.
- McNally J. et al (1997) Current Realities in the school teaching experience. *Teaching and Teacher Education* 10 no 4 pp219-230
- Renwick M. and Vize J., (1993) *Windows on Teacher Education, phase 4: the first year in the Classroom*, New Zealand Council for Educational Research
- Sellars N. and Stevens K.J., (1983) Three problems in the relationship of educational theory and teaching. *Australian Journal of teaching practice*, Vol 3 no 2
- Waghorn A. and Stevens K. (1996) Communication Between Theory and Practice: How Student Teachers Develop Theories of Teaching. *Australian Journal of Teacher Education* Vol 21 no 2 pp70-81
- Singer A. Pezone M., (2003) Education for Social Change: From Theory to Practice . [Louisville.edu/ journal/workplace/issue5p2](http://Louisville.edu/journal/workplace/issue5p2)
- Smith K. and Hodson E., Theorising practice in initial teacher education. *Journal of Education for Teaching* Vol 36, no 3 pp259-275
- Smith K. and McLay M. (2007) Curates eggs? Secondary teachers' experience of the Graduate Teacher Programme and the Postgraduate Certificate in Education. *Journal of Education for Teaching ; International research and pedagogy* 33, no 1 pp35-64

Williams A. and Soares A., (2000) Sharing roles and responsibilities in Initial Teacher Training: Perceptions of some key players. *Cambridge Journal of Education* 32 no 1 pp91-107

Wilson E., (2005) Powerful pedagogical strategies in initial teacher education. *Teachers and Teaching: theory and practice* Vol 11, no 4 pp359-379

Appendix 1: Raw Results

	Total number of respondents			Question 1: Do you think studying theoretical issues in ITT is important?	%
ALL Cohorts	163		Strongly Agree	49	30
			Agree	108	66
			Disagree	5	3
			Strongly Disagree	1	1
Teach First	38		Strongly Agree	14	37
			Agree	24	63
GTP	57		Strongly Agree	13	23
			Agree	41	72
			Disagree	2	4
			Strongly Disagree	1	2
PGCE	68		Strongly Agree	22	32
			Agree	43	63
			Disagree	3	4

		Question 2b: With whom have you discussed issues of learning and teaching at a theoretical level?						To what extent?		
		SMC	Subject Mentor	Other Dept Colleagues	Other colleagues in school	Senior Leaders	Other	Superficially	In depth	Not discussed
ALL Cohorts	Percentage	19	31	22	15	12	1	21	71	9
Teach First	Raw totals	9	18	14	11	7	2	13	16	8
	Percentage of responses from cohort	15	30	23	18	11	3	35	43	22
GTP	Raw totals	25	40	35	23	17	3	13	41	3
	Percentage of responses from cohort	17	28	24	16	12	2	23	72	5
PGCE	Raw totals	29	46	27	17	16	0	16	42	1
	Percentage of responses from cohort	21	34	20	13	12	0	27	71	2

		Question 2c: With whom have you discussed the curriculum at a theoretical level?						To what extent?		
		SMC	Subject Mentor	Other Dept Colleagues	Other colleagues in school	Senior Leaders	Other	Superficially	In depth	Not discussed
ALL Cohorts	Percentage	13	40	27	8	10	2	39	49	12
Teach First	Raw totals	4	16	14	2	4	2	18	7	9
	Percentage of responses from cohort	10	38	33	5	10	5	53	21	26
GTP	Raw totals	13	45	27	11	10	2	24	28	4
	Percentage of responses from cohort	12	42	25	10	9	2	43	50	7
PGCE	Raw totals	21	51	35	10	14	1	15	37	4
	Percentage of responses from cohort	16	39	27	8	11	1	27	66	7

		Question 2d: With whom have you discussed purposes and aims of education and schooling at a theoretical level?						To what extent?		
		SMC	Subject Mentor	Other Dept Colleagues	Other colleagues in school	Senior Leaders	Other	Superficially	In depth	Not discussed
ALL Cohorts	Percentage	21	29	19	14	15	3	40	34	26
Teach First	Raw totals	6	11	8	3	3	3	12	8	14
	Percentage of responses from cohort	18	32	24	9	9	9	35	24	41
GTP	Raw totals	18	29	19	13	12	2	25	17	12
	Percentage of responses from cohort	19	31	20	14	13	2	46	31	22
PGCE	Raw totals	25	28	17	16	19	1	19	23	11
	Percentage of responses from cohort	24	26	16	15	18	1	36	43	21

		Question 2e: With whom have you discussed subject pedagogy (main subject) at a theoretical level?						To what extent?		
		SMC	Subject Mentor	Other Dept Colleagues	Other colleagues in school	Senior Leaders	Other	Superficially	In depth	Not discussed
ALL Cohorts	Percentage	13	44	24	9	7	2	35	49	17
Teach First	Raw totals	2	19	11	2	2	3	14	11	9
	Percentage of responses from cohort	5	49	28	5	5	8	41	32	26
GTP	Raw totals	15	40	23	15	7	3	17	31	7
	Percentage of responses from cohort	15	39	22	15	7	3	31	56	13
PGCE	Raw totals	17	53	28	7	8	0	19	28	8
	Percentage of responses from cohort	15	47	25	6	7	0	35	51	15

		Question 2f: With whom have you discussed social issues at a theoretical level?						To what extent?		
		SMC	Subject Mentor	Other Dept Colleagues	Other colleagues in school	Senior Leaders	Other	Superficially	In depth	Not discussed
ALL Cohorts	Percentage	20	24	20	21	11	4	32	56	12
Teach First	Raw totals	6	13	10	16	7	3	15	11	7
	Percentage of responses from cohort	11	24	18	29	13	5	45	33	21
GTP	Raw totals	26	33	30	35	14	7	18	42	8
	Percentage of responses from cohort	18	23	21	24	10	5	26	62	12
PGCE	Raw totals	40	43	32	28	20	5	16	34	3
	Percentage of responses from cohort	24	26	19	17	12	3	30	64	6

	Question 4: Do mentors have a good understanding of theoretical issues?			
	Yes	Limited	No	Total
ALL Cohorts	61	34	5	100
Teach First	11	22	5	38
	29	58	13	100
GTP	36	15	1	52
	69	29	2	100
PGCE	46	15	2	63
	73	24	3	100

Question 6: To what extent is day to day practice enhanced by knowledge of theories?

	A lot	A fair amount	A little	Not at all	
ALL Cohorts	13	46	36	5	100
Teach First	4	13	16	3	36
	11	36	44	8	100
GTP	4	31	14	4	53
	8	58	26	8	100
PGCE	12	25	24	1	62
	19	40	39	2	100